

# ECT3000 SERIES

## ECT3006 TWO/THREE CHANNEL 3G-SDI, HD-SDI, HDTV, ASI SERIAL & CONTROL DATA SIGNALS OPTICAL LINK



### FEATURES

- ❑ SDI, HD-SDI, HDTV & ASI Signals Compatible
- ❑ Supports 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps and 2.97 Gbps Serial Data Rate Operation
- ❑ Reclocked Mode with Automatic or Manual Rate Selection
- ❑ Non-reclocked Mode Operation (optional)
- ❑ Automatic Cable Equalization
- ❑ Control Data Interface TTL, RS-232, RS-422, RS-485 & Contact Closure
- ❑ One, Two, or Four Fibers Configurations
- ❑ Unidirectional or Bi-directional Transmission
- ❑ Link and Rate Status Indicators

The ECT3006 system provides a high performance link for reclocking and non-reclocking simultaneous transmitting of two or three 3G-SDI, HD-SDI, HDTV, ASI serial data and control data signals over a fiber optic cable.

This system is available in several configurations which provides the following:

1. Unidirectional transmission of three SD and two control data signals via 1, 2, or 4 fibers.
2. Transmission of three SD signals in one direction and two data signal – in opposite direction via 1, 2 or 4 fibers.
3. Unidirectional transmission of two SD signals and bi-directional transmission of two control data signals (except RS-485 - one signal only) via 1, 2, or 4 fibers.
4. Bi-directional transmission of one SD and two control data signals (except RS-485 - one signal only) via 1, 2, or 4 fibers.

The ECT3006 system is available as a rack card which is compatible with USR series chassis and as a standalone module.

It is the cost-effective solution for transmission of 3G-SDI & control data signals over a fiber optic cable.

Fiber Type	Single mode
Optical Core Diameter	8/10 $\mu$
Operating Wavelength:	
4 Fiber Configuration	1310 or 1550 nm
2 Fiber Configuration	WDM: 1310 & 1550 nm
1 Fiber Configuration	CWDM: 1470 - 1610 nm
Optical Power Source	Laser
Optical Power Output	-3 dBm/per wavelength*
Receiver Sensitivity	-20 dBm
Optical Connectors	ST, SC, FC

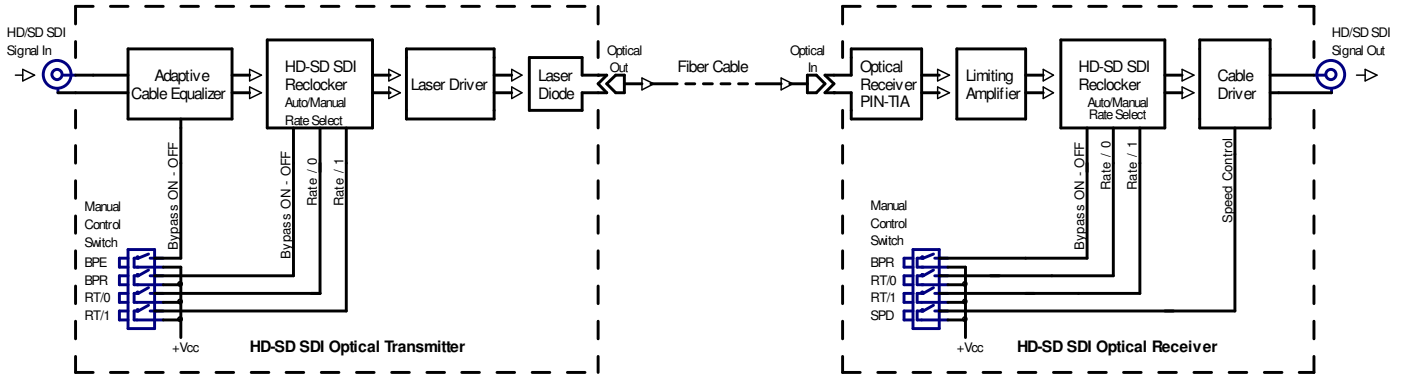
\* higher power laser sources are available per special request

<b>Standards Support</b>	SMPTE 422M 1080p 3 Gbps SMPTE 292M 1.485 Gbps SMPTE 259M 270Mbps SMPTE 344 540 Mbps DVB-ASI 270 Mbps
<b>Operating Mode</b>	Reclocked with Automatic or Manual Rate Selection & Non-Reclocked
<b>Cable Equalization (Automatic)</b>	120 m @ 3 Gbps 160m @ 1.485 Gbps 400m @ 270 Mbps
<b>Connector</b>	BNC 75 Ohm
<b>Control Data Interface</b>	2 Channel: TTL, RS-232, RS-422 & Contact Closure 1 Channel: RS-485
<b>Control Data Rate</b>	DC - 26 Mb/sec
<b>Power Requirements</b>	11 - 15 VDC @ 0.75 A
<b>Operating Temperature</b>	-30°C to +70°C (-22°F to +158°F)
<b>Dimensions (without an optical connector)</b>	11.6"(295 mm) x 5.2"(132 mm) x 1.05"(27 mm)



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HD/SD SDI Optical Link / 1 Channel  
Block Diagram

## ORDERING INFORMATION

3006-T3-DT-X4Z – SD/TX - ch. 1,2,3 & CD/TX - ch.4/1310 or 1550 nm, 4 fiber module/card

3005-R3-DR-X4Z – SD/RX - ch. 1,2,3 & CD/RX - ch.4, 4 fiber module/card

3006-T3-DT-X2Z – SD/TX - ch.1/1310 nm, ch.2/1550 nm, ch.3/1310 nm & CD/TX - ch.4/1550 nm, 2 fiber module/card

3006-R3-DR-X2Z – SD/RX - ch.1/1310 nm, ch.2/1550 nm, ch.3/1310 nm & CD/RX - ch.4/1550 nm, 2 fiber module/card

3006-T3-DT-X1Z – SD/TX - ch.1/1510 nm, ch.2/1530 nm, ch.3/1550 nm & CD/TX - ch.4/1570 nm, 1 fiber module/card

3006-R3-DR-X1Z – SD/RX - ch.1/1510 nm, ch.2/1530 nm, ch.3/1550 nm & CD/RX - ch.4/1570 nm, 1 fiber module/card

3006-T3-DR-X4Z – SD/TX - ch. 1,2,3/1310 or 1550 nm & CD/RX - ch.4, 4 fiber module/card

3005-R3-DT-X4Z – SD/RX - ch. 1,2,3 & CD/TX - ch.4/1310 or 1550, 4 fiber module/card

3006-T3-DR-X2Z – SD/TX - ch.1/1310 nm, ch.2/1550 nm, ch.3/1310 nm & CD/RX - ch.4/1550 nm, 2 fiber module/card

3006-R3-DT-X2Z – SD/RX - ch.1/1310 nm, ch.2/1550 nm, ch.3/1310 nm & CD/TX - ch.4/1550 nm, 2 fiber module/card

3006-T3-DR-X1Z – SD/TX - ch.1/1510 nm, ch.2/1530 nm, ch.3/1550 nm & CD/RX - ch.4/1570 nm, 1 fiber module/card

3006-R3-DT-X1Z – SD/RX - ch.1/1510 nm, ch.2/1530 nm, ch.3/1550 nm & CD/TX - ch.4/1570 nm, 1 fiber module/card

3006-T2-DX-X4Z – SD/TX - ch. 1,2/1310 or 1550 nm & CD/TX - ch.3/1310 or 1550 nm, CD/RX – ch.4, 4 fiber module/card

3005-R2-DX-X4Z – SD/RX - ch. 1,2 & CD/RX - ch.3, CD/TX – ch.4/1310 or 1550 nm, 4 fiber module/card

3006-T2-DX-X2Z – SD/TX - ch.1/1310 nm, ch.2/1550 nm & CD/TX - ch.3/1310 nm, CD/RX - ch.4/1550 nm, 2 fiber module/card

3006-R2-DX-X2Z – SD/RX - ch.1/1310 nm, ch.2/1550 nm & CD/RX - ch.3/1310 nm, CD/TX - ch.4/1550 nm, 2 fiber module/card

3006-T2-DX-X1Z – SD/TX - ch.1/1510 nm, ch.2/1530 nm & CD/TX - ch.3/1550 nm, CD/RX - ch.4/1570 nm, 1 fiber module/card

3006-R2-DX-X1Z – SD/RX - ch.1/1510 nm, ch.2/1530 nm & CD/RX - ch.3/1550 nm, CD/TX - ch.4/1570 nm, 1 fiber module/card

3006-TR2-DX-X4Z – SD/TX - ch. 1/1310 or 1550 nm, SD/RX – ch.2 & CD/TX - ch.3/1310 or 1550 nm, CD/RX – ch.4, 4 fiber module/card

3005-RT2-DX-X4Z – SD/RX - ch. 1, SD/TX – ch.2/1310 or 1550 nm & CD/RX - ch.3, CD/TX – ch.4/1310 or 1550 nm, 4 fiber module/card

3006-TR2-DX-X2Z – SD/TX - ch.1/1310 nm, SD/RX - ch.2/1550 nm & CD/TX - ch.3/1310 nm & CD/RX - ch.4/1550 nm, 2 fiber module/card

3006-RT2-DX-X2Z – SD/RX - ch.1/1310 nm, SD/TX - ch.2/1550 nm & CD/RX - ch.3/1310 nm & CD/TX - ch.4/1550 nm, 2 fiber module/card

3006-TR2-DX-X1Z – SD/TX - ch.1/1510 nm, SD/RX - ch.2/1530 nm & CD/TX - ch.3/1550 nm & CD/RX - ch.4/1570 nm, 1 fiber module/card

3006-RT2-DX-X1Z – SD/RX - ch.1/1510 nm, SD/TX - ch.2/1530 nm & CD/RX - ch.3/1550 nm & CD/TX - ch.4/1570 nm, 1 fiber module/card

X = M for module, C for rack card

Z = ST, SC, FC for optical connectors

SD/TX - Serial data transmitter, SD/RX - Serial data receiver, CD/TX - Control data transmitter, CD/RX - Control data receiver



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